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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/029,479 10/21/98 LAVI

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EXAMINER

WOITACH, J

ART UNIT

PAPER NUMBER

1632

DATE MAILED:

06/29/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/029,479

Applicant(s)
Lavi, S.

Examiner
Joseph Weitach

Group Art Unit
1632



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 1 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-44 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☐ Claim(s) _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☒ Claims 1-44 are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1-4, 8, 13-15, drawn to a method of detecting cancerous cells in a patient by detecting alterations of PP2C alpha with methods related to detecting nucleic acids.

Group 2, claim(s) 1, 2⁵-7, 9, 10, 23, 24, drawn to a method of detecting a cancerous cells in patient by detecting alteration of PP2C alpha with methods related to detecting polypeptides.

Group 3, claim(s) 11, 12, drawn to a transgenic mammal or cell line, and a knock-out eukaryotic organism.

Group 4, claim(s) 16-22, drawn to monoclonal and polyclonal antibodies.

Group 5, claim(s) 1, 2, 25-29, drawn to a method of treating cancer in a patient by administering a nucleic acid encoding PP2C alpha.

Group 6, claim(s) 1, 2, 30-33, drawn to a method of treating cancer in a patient by administering a antisense vector encoding PP2C alpha.

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Group 7, claim(s) 34, 35, drawn to a method for the activation of the gene product of PP2C alpha.

Group 8, claim(s) 36, 37, 38, drawn to a method to detect cancer in a patient by detecting altered PP2C **beta** activity by methods which employ a polynucleotide.

Group 9, claim(s) 36, 37, 39, drawn to a method to detect cancer in a patient by detecting altered PP2C **beta** activity by methods which employ a polypeptide.

Group 10, claim(s) 40-44, drawn to an antibody which binds to PP2C **beta**.

The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: There is no special technical feature of the first invention of claims 1-4, 8, 13-15 that is shared by the inventions of groups II-X, considered as a whole which defines a contribution over the prior art. Independent claim 1 is broadly drawn to a method of detect cancerous cells in a patient by evaluating alterations in PP2C alpha gene activity. Kitamura *et al.* (Jpn J Cancer Res 83(1):66-71) disclose methods based on detecting differences in PP2C alpha activity during an experimental model of hepatocarcinogenesis. Kitamura *et al.* report that increased levels of PP2C were detected after 5 weeks of treatment with DEN in treated animals versus control, whereas levels were decreased to normal levels in the primary hepatoma that were induced. Thus, the modulation of PP2C activity in cancer cells was previously known in the art and the broad method recited in claim 1 is anticipated by Kitamura *et*

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al. Since claim 1 does not contribute a special technical feature which defines a contribution over the previous art, the methods drawn to detecting differences in PP2C alpha by other means such as methods using the polypeptide and/or antibodies, the methods of treatment with vectors expressing PP2C and/or antisense constructs, and all methods and products drawn to PP2C beta of Groups II-X have been restricted because they encompass different inventions no longer linked by a special technical feature.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Woitach, whose telephone number is (703) 305-3732. The examiner can normally be reached on Monday through Friday from 8:00 to 4:30 (Eastern time).

If attempts to reach the examine by telephone are unsuccessful, the examiner's supervisor, Jasmine Chambers, can be reached on (703) 308-2035. The fax number for group 1600 is 1(703)308-4242.

An inquiry of a general nature or relating to the status of the application should be directed to the group receptionist whose telephone number is (703) 308-0196.

Joseph T. Woitach

Karen M. Haude
Karen M. Haude
Patent Examiner